

Vol. V

AUGUST 1932



Agricultural Education

What a Father Owes His Son

1. A happy boyhood
 2. The advantage and influence of fatherly companionship
 3. The heritage of a respected and honest name
 4. An education that will enable the boy to make a full and comfortable living for himself and those dependent on him.
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"Before a man can take an intelligent part in creation of change for the better he must be aware of the standards of the present and have in mind a standard for the future—an ideal."—Theodore H. Eaton.

EDITORIAL COMMENT

AGRICULTURAL EDUCATION

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"I SEE BY THE ADS"

BILL CASPER, in *The Progressive Farmer and Southern Ruralist*, writes a squib under the foregoing caption, covering advertisements in the paper.

I see on page 1 where Doctor Myers of Cornell University has an article on trends in farm management. Most of us younger fellows studied farm management in times of prosperity. Was good farm management then good farm management today? We need just such guidance as Doctor Myers gives in this article.

"Migration of Boys Who Have Studied Agriculture" is the title of a master's thesis, abstracted on page 20. Now, you fellows who have been looking for a nice little research problem, read this article and get busy.

What do you conceive a part-time course to be? Read the standards as stated by Mr. Pearson on page 21. He is a specialist in part-time and evening work, and his ideas along these lines are likely to be pretty sound.

The editor wishes that all of you might know personally Doctor Stimson, author of the article dealing with evening unit courses in Massachusetts, page 22. If you know your agricultural education, you will recall his contributions to vocational work as we know it today. Perhaps you have read some of his books. In reading this article you may not agree that the individual plan of instruction comes under "systematic instruction." It is possible that there is a richer field for development along this line than you or I had thought about.

In "Evening Classes and the Rating of Agriculture Departments," page 23, you will notice that in Georgia, at least, the best teachers of vocational agriculture are conducting more than one evening school, and that these teachers have as many classes at centers other than their departments as they have at their department centers.

Doctor Field, on page 24, presents a good discussion of individual and team demonstration as a method of teaching. Maybe we could make greater use of this method than we do in teaching vocational agriculture. If you are training a team or expect to judge demonstration teams, you will want to preserve the evaluation guide.

Good teachers of agriculture are always looking for ways of increasing their usefulness, ways of extending their program. Many of us may have overlooked the opportunity of helping urban people solve their agricultural problems. It would seem that we have the responsibility of doing whatever we can to establish vocational agriculture more securely in the public confidence. The "Gardening Project With Urban Families," page 26, may be suggestive.

No attempt has been made to touch on all of the good things in this issue. The farm mechanics section has many

suggestions. Do your Future Farmers get to read the Future Farmer section? The editor believes that if the local chapter is really alive and progressive, it will subscribe for the magazine and make use of the ideas presented in its columns. Many articles, other than Future Farmer articles, are of interest to the boys.—C. H.

FARM MECHANICS IN RELATION TO PRESENT CONDITIONS

NOT since the inception of vocational education in agriculture under the Smith-Hughes Act has it been more imperative that farmers reduce expenses of farm operations. Drastic reductions have been made not from choice but from sheer inability to maintain the customary rate of expenditure. A major item of expense on most farms is the maintenance of farm equipment.

Recent studies by the U. S. D. A., co-operating with the Department of Agricultural Economics, Kansas State College, indicate that under the prices of two years ago, there was approximately \$7 invested in machinery, exclusive of automobiles and trucks, for each acre under cultivation in the western Kansas wheat belt.

A vocational agriculture department in this section reported an enrollment of 26 farm boys whose home farms averaged 1,400 acres. Approximately 1,000 acres was the average under cultivation on each farm. This indicates an average investment in farm machinery on the home farm of each boy of \$7,000, exclusive of trucks and automobiles.

Farmers have acquired modern farm machinery more rapidly than the ability to operate and repair such machinery intelligently and skillfully. In normal times farmers with heavy investment in machinery leaned heavily on the skilled mechanic in meeting their repair problems. Without the ready cash to do this, much expensive machinery must be repaired by the farmer himself or be discarded.

With the ultimate objective of vocational education in agriculture "to train those who have entered upon or who are about to enter upon the work of the farm," it is doubtful if we can overlook training in farm mechanics and attain this objective.

The responsibility cannot be met by waiting till the opening of school to ask boys to volunteer to bring in miscellaneous shop jobs from the home farm, nor can it be met by setting up a course composed only of a series of exercises involving basic skills. The teacher must study the problem on the farms of his community and particularly on the home farms of his boys. He must acquaint himself with the opportunities that exist there and, together with the boy and his father, work out a balanced program of mechanics work for the year that actually enables the boy to meet such mechanical problems as the farm presents. It is entirely possible some of these jobs must be done on the home farm due to the inconvenience or impossibility of bringing them to the school shop. We cannot afford to exclude a worthwhile mechanics job or problem because it cannot be conveniently brought within the four walls of a school shop.

It is not enough that boys acquire manipulative skill with tools. They must understand mechanical principles if they are to meet mechanical problems intelligently. Often in the school shop, manipulative skills are stressed to the exclusion of principles.

When one has actually acquainted himself with the opportunities and responsibilities of a course in farm mechanics, how ridiculous becomes the spectacle of farm boys building book ends, tabourets, stools, and picture frames under the guise of farm mechanics. Where this goes on, the department has little reason to expect the confidence and respect of farmers. It is not meeting its opportunities and responsibilities.—L. B. P.



Professional



Trends in Farm Management

W. I. MYERS, Professor of Farm Management, Cornell University

THE primary object of farm management is to determine facts and principles that will aid farmers in increasing their financial returns. Unlike the natural sciences farm management must be studied in the actual operation of real farms. Since individual farms differ widely, large numbers of them must be studied in order to get enough farms that are similar in any one characteristic to make a significant group. The conclusions of one farm management study cannot be applied without modification to other regions. Hence, such studies should be made in important typical farming areas and repeated frequently. The trend of farm management research has been from the general to the specific. To be most useful such studies should show the specific application of principles to a given locality under existing conditions. Differences in the relative profitableness of farms are due largely to four important business factors:

1. Size of the farm business;
2. Yields of crops and of animals;
3. Labor efficiency;
4. Choice of enterprises.

I. Size of the farm business.

1. Under normal conditions moderately large farms return larger average incomes to their operators than small farms.

2. The chance of a good income or a large loss is much greater with a moderately large business.

3. The most important reason for the larger financial returns of large farm businesses is that they are more efficient in labor, machinery, power, and use of buildings. They also have an important advantage in buying and selling.

4. In very unfavorable years moderately large farms may return larger losses to their operators than small farms.

6. With very low yields moderately large farms may return larger losses than small farms.

7. The size of a farm business can be increased by renting or buying more land or by increasing the intensity of the present farm.

8. The minimum size of a farm business is enough income-producing work to keep the available labor force profitably employed.

II. Yields of crops and of animals.

1. Farms with yields above the average of the community return higher average incomes to their operators than farms with low yields.

2. Under present conditions good yields are the most important single factor affecting labor efficiency and income.

3. The best measure of labor efficiency is the quantity of products produced per man. In order to obtain good effi-

In periods of economic stress the demand for teaching sound principles and practices of farm management is especially acute. Accordingly, the suggestions of Dr. Myers and the brief outline presented here are especially appropriate. They are designed primarily for the guidance of teachers of agriculture. The outline should do much to center attention on basic procedures in organizing farm management courses in local schools.—A. K. Getman.

ciency it is necessary to have good yields and an efficient-sized business.

4. With good yields it is more important to have a moderately large farm than with low yields.

5. In times of depression good yields are even more important than in normal times.

6. Yields should be increased by relatively cheap methods such as ceasing to work poor land and better care of good land.

7. The soundest way of decreasing the total production of agriculture is by ceasing to work poor land and ceasing to keep poor animals.

III. Labor efficiency.

1. Farms with high labor efficiency return higher average incomes to their operators than farms with poor labor efficiency.

Since labor is relatively high in price, labor efficiency is more important in times of depression than in normal times.

3. The most important ways of obtaining good labor efficiency are: efficient-sized business; good yields; planning work; use of machinery; well-planned layout and buildings.

IV. Choice of enterprises.

1. The farm business should include that combination of enterprises that will return the largest income for the year's work.

Data on relative profitableness of different enterprises are valuable in planning the combination of enterprises. While profitable enterprises should be emphasized, it is seldom wise to eliminate an unprofitable enterprise unless there is a better one to take its place.

3. The trend of agriculture is toward increasing specialization, but extreme specialization is seldom wise.

4. It is usually best to produce as much as possible of the most profitable enterprise of the region—cotton or milk or potatoes—and then to combine with this, other next best enterprises to increase the labor efficiency and the net income.

The present indications are that the general price level of farm products will be about or below the 1910-14 average during the next decade. If this forecast is true, farmers must learn to produce

at a profit at pre-war prices. This emphasizes the importance of efficient production and marketing. Farmers tend to adjust their business to changing economic conditions, but there is a serious lag in adjustment because of habit or tradition or doubt as to the permanence of the change. The teaching of farm management will hasten necessary adjustments with corresponding reduction of suffering and loss. The only constant factor in agriculture is the constancy of change. The time has passed when farmers could solve successfully the problems of adjustment by knowledge gained from experience alone. If the future farmers now in school are successfully to meet the challenge of their times, their business plans must be based on reason—on sound, economic planning—and not on habit, tradition, and emotion.

It Pays to Look Well

ON HIS return from a visit to an agriculture department a student said, "I read real character in the life of the teacher as soon as I stepped into the agriculture room." It so happened that the same day a superintendent of schools in a Minnesota city called at our office, and during the course of conversation he said, "I had to call the agriculture teacher to task for carelessness in his personal appearance." And then to cap the climax the state supervisor reported that on his last series of visits to teachers he checked off 22 departments that are not kept in an orderly manner.

The teacher to whom the student referred is a man who is extremely careful about the way he dresses, the manner in which he keeps the agriculture room, and the way he uses English. The teacher to whom the superintendent referred is a man who is careless in the matter of clothes. He seems to feel best when he wears baggy trousers, hunting boots, and an old leather waistcoat. A few grease spots here and there are no cause for worry. The agriculture room is always in disorder.

It does seem that there is some relation between the way a person thinks, speaks, dresses, and the way his classroom looks. If we step into an agriculture room and find the equipment, books, bulletins, magazines, and supplies carefully put away in an orderly manner, we may expect to find the teacher of agriculture well groomed and appropriately dressed. Order is said to be the first law of heaven. Let us bring just a little bit of heaven into the environment of the young people with whom we work during an important habit-forming period of their lives. Most of the things we do in life are habits. The habits are the expressions

of the way we think about things. Some people can be happy in an environment where everything is in disorder, others are not happy until everything is in order. The habits, the attitudes, the ideals are exceedingly important phases of learning activities. These may not be taught as objectives in our lessons, but they are exceedingly important concomitant learnings in our school activities.

The students in agriculture should be taught to take pride in the appearance of the classroom. This same idea will be reflected in their work. The written lessons will be more carefully done. The farm practice plans will be arranged in a more orderly sequence and the reports will be more carefully prepared.

But what is the use of philosophizing further? What we want to say is that there is nothing about the teaching activities of the teacher of agriculture that calls for a lower standard of clothing, grooming, or room appearance than for any other teacher in the school. It is not enough to have the room straightened up once or twice a year. It should be kept orderly all the time. The bulletins should be filed and the magazines should be arranged so as to present a pleasing appearance. The bulletin board should not be a catch-all of old clippings, pictures, and notices arranged in cyclone fashion. It should be a place where materials of current interest are kept. The students as well as the teacher should feel a responsibility for keeping the material up to date.

The superintendents and the state supervisors like to see good housekeepers in the agriculture department.—Minnesota Visitor.

Some Factors Influencing Discontinuance of Departments of Vocational Agriculture in Georgia

J. T. WHEELER,
Georgia State College of Agriculture

THE purpose of this study is to find factors responsible for the discontinuance of departments of vocational agriculture in Georgia. The 56 departments which have been discontinued in Georgia from 1921 to 1931 were used in making the study.

It appears from the facts set forth in this study that the following factors influenced the discontinuance of the departments involved:

1. Some of the departments were located too near other active departments.
2. Competition from manufacturing industries for the boys eligible for vocational work.
3. The shift of boys from the country to the cities.
4. Some of the departments were located in schools with too small an enrollment of farm boys.
5. Departments not established directly by the county board of education of the local school district and, therefore, more likely to be discontinued.
6. The absorption of departments by municipal districts reaching out further into the rural areas, and the consolidation of rural schools.
7. The removal of the county school superintendent from office or a change in the personnel of the county board of education.

8. Financial retrenchment.

9. The agriculture teacher's experience and training.

10. Failure to conduct evening class-work with the adult farmers of the community.

While the departments discontinued were dropped for a combination of reasons, it is set forth in this study that, in the opinions of the state supervisor and the county school superintendents, the two most significant reasons for the dropping of departments of vocational agriculture are: first, weak teaching; second, departments located in schools with enrollments too small for adequate work.

Note: This digest is of a thesis prepared by Byron Dyer, graduate student of the Georgia State College of Agriculture.

The Migration of Boys Who Have Studied Vocational Agriculture

L. J. BAILEY, Pennsylvania

[Editor's Note: This study is presented here as a type of study which could be made by many teachers of agriculture.]

SEVERAL studies have been made of the occupations chosen by boys who have studied vocational agriculture, but none dealing with their migration. The purpose of this study was to determine to what extent agriculturally trained boys migrate, as well as the occupations they choose.

Four high schools in north-central and north-western Pennsylvania were chosen in which to make the study. These schools have long-established departments of vocational agriculture in which there have been few changes of supervisors.

The writer visited the schools and from the general office records secured the names of all boys who had studied at least one year of vocational agriculture between September, 1919, and June, 1927, and who had left school by the latter date. This allowed a minimum period of nearly five years in which to settle down. As much information as possible was secured from the general records, after which the writer got additional information from the principal and supervisor of agriculture. Some further information was obtained from former supervisors of agriculture, a county agent, citizens, offices of a teachers college, and the Pennsylvania State College.

This information was placed on individual information sheets from which it was drawn for purposes of tabulation, analysis, and discussion. Some of the significant facts revealed by this study, in which 80 percent of the boys whose records were used were farm reared, are:

1. Thirty-one percent of the boys left school with only one year of agriculture, and 37 percent with four years.
2. Fifty-three percent of all boys who studied vocational agriculture were graduated.
3. Seventy-one percent of the boys graduated had studied four years of vocational agriculture.
4. Twenty-six percent of the non-farm reared boys are engaged in the same occupations as their fathers, or occupations very closely related.

5. Fifty percent of the farm reared boys and 13 percent of the non-farm reared boys are farming.

6. Nine percent of the farm reared and 2 percent of the non-farm reared boys are engaged in occupations closely related to farming.

7. Eighty-seven percent of the farmers are located in their original school areas; 95 percent are farming in Pennsylvania.

8. A slightly greater percentage of the boys who studied vocational agriculture two years or less are farming than of the boys who studied it for three or four years. The three or four-year boys are found more often in related occupations.

9. One-third of the boys have left their original school areas.

10. Farm reared graduates migrated to a greater extent than farm reared non-graduates.

11. One-half of the farm reared boys have left the farm, going in greater numbers to places of less than 5,000 population. The non-farm reared boys have moved generally in the direction of larger cities.

12. The median distance of migration is slightly less than 50 miles.

13. Boys from the upper third of their classes migrate more often than from the other two-thirds.

14. Of the graduates, 17.2 percent entered college.

15. Boys whose project success was reported to be high are residing in their school areas and farming to a greater extent than those whose success was given as average or low?—Pennsylvania Rural Life Letter.

Approbation

They spoke of the thing I had made,
Carelessly, unaware
That I, who had torn my heart to build
It well, stood there.

Casual approval they gave
Passing the time of day—
But their words were wine to my thirsting soul,
And fires to light my way.

—JEAN MAURY GREENWOOD,
Sunset High School,
Dallas, Texas.

From Younger Poets.

THE THINKER

Back of the beating hammer by which
the steel is wrought,
Back of the workshop's clamor the
seeker may find the thought;
The thought that is ever Master of iron
and steam and steel,
That rises above disaster and tramples
it under heel.

Light of the roaring boiler, force of the
engine's thrust,
Strength of the sweating toiler, greatly
in these we trust;
But back of them stands the schemer,
the Thinker who drives things thru,
Back of the job the Dreamer who's making
the dream come true.

—Berton Braley.

Experience means doing a thing next
time in a better way.



Part-Time Courses



Standards for Part-Time Classes

JAMES H. PEARSON, Specialist in Agricultural Education
(Part-time and Evening Work)



James H. Pearson

THE Census Bureau has facts which make it possible to determine the number of out-of-school boys between the ages of 14 and 20 living on farms in the United States. That number in 1930 was 1,348,647 as compared with 1,176,454 in school. Since these

data do not include the ages up to 25 years which is usually considered in the part-time group, the number of out-of-school farm boys needing part-time instruction is much larger than this number. The fact that there are more farm boys in the part-time age group out of school than in school seems to be well established by census data and local studies.

The rather slow response in meeting the needs of this group of out-of-school boys has been due to demands on the time of supervisors, teacher trainers, and teachers for the development of the all-day and evening schools and in part to a rather narrow concept of the part-time program with lack of vision of its possibilities. Since the all-day and evening programs are becoming very well established, more time and thought should be devoted to the development of the part-time program.

It is also necessary to have a broad concept of the part-time program which means a range in age to include all out-of-school farm boys over 14 years old who do not, on account of farming status and experience, fit well into the evening school program; flexible types of school organization in order that the needs of boys will be duly recognized in planning the work rather than attempting to adjust the part-time class to a fixed kind of organization for the work, including the place of meeting, the time of year and hour of the day to meet, frequency of meeting, length of the school in terms of numbers of sessions, and the kind of content taught; a practical interpretation of related instruction to mean (a) functional technical knowledge, (b) applied courses; supervised or directed practice organized to meet the needs of the individual boy which may be a home project, supplementary farm practice, or both.

Any standards for part-time classes must be very broad to include all situations which may be encountered in organizing a class, and must be stated in terms of minimum standards.

Summary of Standards

Whom to Enroll—Farm boys between the ages of 14 and 25, regardless of previous schooling, who are not established

as farmers in a managerial capacity and who are not regularly enrolled in school.

Time of Year to Conduct the School—At any time when the boys are available and when the teacher or teachers can arrange to meet the class.

Time of Day to Hold the Meeting—At any time between 8:30 a. m. and 9 p. m. when the boys and the teachers find it possible to meet, and the school schedule will permit the meetings.

Number of Meetings—The practice in a number of states and the opinion of the majority of administrators justify a minimum standard of at least 15 meetings of not less than 90 minutes each, and preferably not less than one meeting per week as reasonable for this type of work.

Agricultural Course Content—The agricultural course content must be based on the needs of the individuals in the class, which means that some of the instruction may be handled with the class as a whole, other parts with groups on special problems of interest to only a few members of the group, and still other parts as individual instruction to meet the special needs of some one boy.

Directed or Supervised Practice—The supervised or directed practice must reflect the training program of each boy according to the type of farming which he is planning to enter and may be on a home project basis, or as supplementary farm practice, or in many cases both.

Related Subjects—The amount of related instruction offered will be governed by the specific needs of the group. In general, such instruction should be functional, technical knowledge and related courses taught by the teacher of agriculture as a part of the agricultural instruction rather than as separate related courses taught by other teachers.

Part-Time Boys Put Pep Into Their Pepper Project

W. P. AND S. G. GRIFFIN of the Dover, Florida, part-time agriculture class have proven that they are worthy to be called Future Farmers of Florida. Last spring they planted 3½ acres of Ruby King peppers, intercropping with strawberries. They fertilized the peppers twice, using a 6-8-1 mixture for the first application and a 6-8-5 for the second.

Their expenses included: plants, \$14; rent, \$36; spray, \$2.50; fertilizer, \$70.20; labor, \$99; and gas and oil, \$10.

Their labor included: plowing, 150 hours; hoeing, 240 hours; setting plants, 60 hours; picking, 180 hours; and marketing, 30 hours; totaling 660 hours of man labor.

Their peppers matured early, and they picked six times, harvesting a total of 868 unpacked field crates for which

they received \$1,971.20, or an average of \$2.27 per crate.

The total expenses of the pepper crop, including labor, was \$231.70, giving them a net profit of \$1,739.50. Their total labor income was \$1,838.50.

Both boys are active members of the Dover Future Farmer Chapter. W. P. played on the basketball team and was one of the representatives of the chapter at the state meeting where he participated in the livestock judging contest. They are both planning to farm as owners in the near future.



Following Beaten Paths

TWO fishermen walk along beside a stream. It is difficult moving, for the underbrush is thick and tangled and filled with thorns. One finds a path where other fishing people have beaten down the bushes and undergrowth. What relief! He follows this. It leads to the stream. He drops his line in—catches nothing and goes on. All day he follows the path—all day he fishes where others have fished. He catches nothing, and is disgusted. At night he meets his partner who has pushed thru the undergrowth, making his way to the stream in new places, and has a basket filled with fish. It's easier to take the beaten paths, but the successful man walks apart from the crowd.

The excuse of the man who is not making progress is that "He is doing the best he can under the conditions," but if he is not getting ahead—if every year he is not coming nearer to what he wants—it is because he is following beaten paths.—Selected.

Editor's Comment: Have you ever tried getting out of the beaten path and doing some part-time work? It is easier to take the beaten path, but look at the difference in results. How many of us this next year will be a man apart from the crowd?



Evening Schools



Evening Unit Courses in Massachusetts

RUFUS W. STIMSON, Supervisor of Agricultural Education

WE HAVE good evening unit-course work going on every year in Massachusetts.

Part of our work for adults is of the conventional type. Men and sometimes women come from their farms or other places of agricultural or horticultural employment to the schools, and are taught in groups—this instruction being supported by at least six months of supervised practice.



Rufus W. Stimson

Individual Instruction

Some of our best results have been with work of unconventional type where men, and sometimes women, have been taught almost wholly on the premises of the projects of the individuals enrolled, and where the supervised practice has covered at least six months a year, with seldom or never a group meeting. We understand that this type has been frowned upon by certain other states. With us it has been steadily and outstandingly successful.

No better case of this type could be cited than that at New Salem. When the work began, there were only day-class boys enough to warrant employment of an instructor part time. The rest of his time was booked for work with 14 adult raspberry growers. This was nearly 10 years ago, at a time when New Salem had a heavy crop of raspberries, selling at as high as 30 cents a pint box in Boston, with almost no supply from any other source.

A local survey by the agriculture instructor and county agent indicated exceptionally favorable conditions for raspberry growing in the New Salem territory. It was proposed to make this locality a source of disease-free plants, as well as of berries. Every year, however, has brought fresh problems. The nursery sales have been of minor, and berry sales have continued to be of major importance.

"Wet" berries are the bane of the raspberry grower. Berries break down from too much handling as well as from too much heat, rain, and the like, in transit. First dropped into the box, then jolted onto the wagon or truck, then from home conveyance to railroad platform, then into the express car, then to city truck and commission stall, finally jolted again to the local store or market, it was little wonder that prime fruit sometimes broke down, or was alleged to have done so, and that commission house checks were cut below the expectations of the growers.

The instructor took an experimental load of raspberries from his own farm in his own truck about one hundred miles to Boston, the usual market, to see how they would ride and arrive, with but a single loading at the farm and unloading at the commission house. The results were capital. One of his group then took a load in his truck to a nearer city, Worcester, again with capital results. These trips paved the way to the present practice.

The usual strawberry type of shipping crate still contributed to the "wet" berry problem. To see the bottom berries, top baskets had to be taken out. Finally, the past season, the agriculture instructor devised and got adopted, by the commission house and by the growers, a single-layer tray. Now all baskets can be seen at a glance, without touching. The trays are of such length and width that they rest and ride securely. The dealer sets his tray on end, or edge, at an easy angle. The buyer can see all baskets, choose his, and take them. Basket squeezing and bumping have been reduced to once into the tray and once out.

This group has gradually moved from individual shipments and competitive selling, over into co-operative shipments in single lots daily by truck. The truck owner is a careful and responsible operator. He likes his job, and now for several years has done it well. His charges, regulated by contract, are fair.

There have been other bothersome problems involving decision as to varieties, planting distances, pruning heights, fertilizing, cultivating, and mulching.

Finally, the past season, the crowning problem of organization was successfully attacked. This group incorporated itself legally as the New Salem Raspberry Growers Association. As a voluntary group it had pooled orders and bought with considerable savings. But it found added buying prestige thru incorporation; its savings, over and above any previously realized, being \$150 on a single order for baskets. Standards have been set up; and these have been adopted and declared effective for the state by the director of marketing of the state department of agriculture. A distinctive label has been adopted and is being protected.

Thruout, there has been effective voluntary co-operation between the local Smith-Hughes instructor, himself a wide-awake and successful raspberry grower, and the Smith-Lever county agricultural agent, and state college plant disease specialists.

Hybrid Program

Legal provision for teaming up Smith-Hughes and Smith-Lever workers exists in the three counties which have county agricultural schools, Bristol, Essex, and

It is results that count, and so we believe that our readers will be interested in the out-of-the-ordinary procedure that Mr. Stimson, a veteran in the field of vocational agriculture, has found so successful in his state. Read the article with an open mind.—Editor.

Norfolk. A single board of trustees and one director in each county are responsible for the funds and programs of work of both the vocational instructors and the extension agents. Programs are complementary and co-operative.

This administrative arrangement, in force for conservation of public funds and for harmony in public service since these schools started, has made possible a promising experiment last year and this in carrying on evening unit courses. This may be styled our third type of evening unit-course work. It has been effective in fruit growing, poultry keeping, and ornamental gardening courses.

Enrollment problems prompted this third type of work. Too many entered for a vocational class; but not too many for an extension service lecture or demonstration. All the premises would accommodate were admitted. Then, for purposes of organization, each group was split. The limited number that could be followed up faithfully with systematic instruction at their projects were classified and treated as the vocational; the rest, perhaps two-thirds, as the extension service group.

Instruction was planned and conducted for the vocational third or so of the group. It was surprising to see how much more effective than the ordinary extension service demonstration or lecture for the rest, was this primarily vocational, problem, improved practice, and managerial decision method. Instruction centered on crying needs in going enterprises.

We have thus learned that two birds can be killed by one stone. Little that is vitally vocational has been lost. There has been an evident extension service gain. Withal there have been saving of time and funds, and promotion of solidarity. Those who cannot be followed up with systematic instruction at their projects, tho some of their projects may be as big as any and they may be visited once or twice, are reported as benefiting from the extension service; those who can, as benefiting from vocational education.

Long Term Service

Whatever the type of course, planning to stay with a group a long time is probably the best way to start and carry on long-term improvement projects or enterprises with individuals, or long-term upgrading group movements.

The future cannot be infallibly foreseen. Being on the spot at psychological and economical moments is one of the best guaranties of long-term success.

Goodwill Promoted and Kept

We have purposely refrained from evening work in any county where adults are adequately served by Smith-Lever county agents and state college specialists. This has been promotive of goodwill; also, of utmost Smith-Hughes and Smith-Lever co-operation when and where needed.

Future Promising

Our numbers in evening unit courses are but a drop in the sea compared with the tremendous volume of such work in some of the other states. But this report on certain features and tangible results has been requested; and, with utmost confidence in the enduring values of such work, is cheerfully submitted.

Observations of My First Evening Course

R. L. WELTON,
Vocational Agriculture Instructor,
Hoyt, Kansas

1. The need for an evening course can easily be recognized by the teacher. However to merely announce the course would not produce the desired attendance. A letter of inquiry addressed to the 30 leading farmers of the community with return postage, created enough thinking among them to get the idea started. Personal notification of first lesson date was successful in this first evening course in making a start. Evening schools another year will be easier.

2. Found that practically all who attended any, had been present by the fourth lesson.

3. The instructor needs to thoroly instruct himself before attempting a lesson. His evening class consists of mature minds, skeptical, believing only when proof is presented. (One is not dealing with day students.) The leader must be so completely ready with the lesson that if need be he can present the "points" in quick succession. He never knows when the lesson will move along of its own accord or will need his constant support. If he is not prepared 100 percent, I believe the lesson will die on its feet.

4. Found that it was easy to gain interest by making the lessons deal with actual problems and conditions of farmers at Hoyt, Kansas.

5. Also found that the interest could be maintained as long as the problem had not yet been solved. When a conclusion is once drawn, close the discussion.

6. Direct statements, altho they mean nothing in themselves, never fail to "start something."

7. Questions put to individuals drew replies from those who otherwise would have little to say. Questions to the group drew answers from the same students time after time.

8. The blackboard and charts were effective tools whenever used.

9. The help received beforehand relative to outline, course content, and reference turned out to be of inestimable value.

10. Found out that the informal discussion method of evening course instruction is entirely suitable.

Evening Classes and the Rating of Agriculture Departments

GEORGE H. KING,
Associate Professor of Rural Education,
Georgia State College of Agriculture

AT THE 1931 Southern Regional Conference a research program was set up dealing with "Determining the Factors in the High and Low Rating Departments of Vocational Agriculture." The study made in Georgia as a part of this year's program was recently completed.

In Georgia the 23 departments of vocational agriculture rating highest and the 23 departments rating lowest were studied. This gave an excellent opportunity to review in detail the work of these contrasting groups for the year 1930-31.

This study disclosed several factors that might affect the rating of departments of vocational agriculture. However, one of the greatest differences found between high and low rating departments was in the evening class work done by the departments.

In the 23 departments rating highest every teacher conducted one or more evening classes, teaching a total of 49 evening classes. These classes were taught in 46 different centers. Only five teachers held as little as one class, while 18 conducted from two to four evening classes. In these classes 1,886 farmers were enrolled. The median enrollment per department was 68 farmers for the high rating departments.

In the departments rating lowest, four teachers failed to hold an evening class. The remaining teachers held 28 classes. These classes were taught in 26 centers. Eleven of these teachers held one class, and only seven held two or more classes. In these classes 962 farmers were enrolled. The median enrollment per department was 30 farmers for the low rating departments.

A table is here presented contrasting these two groups of departments as to evening classes:

COMPARISON OF HIGH AND LOW RATING DEPARTMENTS OF VOCATIONAL AGRICULTURE IN GEORGIA AS TO EVENING CLASS WORK.

Item	High Rating Depts.	Low Rating Depts.
Number of departments	23	23
Number of evening classes	49	28
Number of evening class centers	46	26
Total enrollment	1,886	962
Median enrollment per dept.	68	30

Teachers in Georgia are rated according to scores made on an objective score card, the limit score being 1,000. Evening classes and evening class enrollment total only 150 points, so it is evident that evening classes are not overstressed.

The outstanding part of this study of evening classes is the difference in the median enrollments of the two groups of departments. To get a median enrollment of 68, teachers in the high rating departments averaged teaching over two evening classes and to do this these 23 teachers conducted classes in 46 centers. This shows that teachers in high rating departments reach 23 centers in addition to the centers in which departments are located.

In contrast to this the teachers in the low rating departments average slightly over one class each, and those teaching evening classes reach only nine additional centers.

From these facts it would seem that the teachers in high rating departments realize that in order to reach the greatest number of farmers, evening classes must be carried to the farmers. From the results secured it is evident that for securing enrollment this method is more effective than having farmers depend altogether on the schools in which departments are located as the only centers of evening class instruction.

Neighbors Gather for Double Evening School

M. H. McDONALD
Park River, North Dakota

I HAVE never undertaken anything that I have enjoyed more than my evening class. There were numerous problems to face but I had very little trouble in overcoming them, and the experience and exchange of ideas that I received strengthened my classroom instruction more than any other thing since I have started to teach.

My first problem was to select a location for my meetings. I did not choose the city school as do most instructors, but went out into the country to a two-teacher consolidated grade school. My reason for this was quite definite. Had I conducted the evening classes at the school I would probably have received a class of farmers who always attend our agricultural meetings and consequently are men who are not in such need of instruction. I would also have received men of several communities, men who do not neighbor, and who are not well acquainted, and hence less possibility for discussion among themselves. My school on the other hand was located at the center of an inland community where the people naturally come to meet and talk; consequently nearly everyone in the community was enrolled in the school.

My next problem was what to do with the women of the community. I thought that they would enjoy meeting also so I asked our home economics instructor what she thought of conducting a school for the women, coinciding with mine. She approved of the idea, and consequently we had two schools in session at the same time. We found that it worked very well to have both mother and dad attending the meetings.

I found the men very interested and surprisingly easy to work with. After we had made a general review of agricultural conditions and the outlook for the common farm enterprises, I let them choose the unit for study. Swine production was chosen, and we divided the unit into 11 lessons covering the study of the swine enterprise in detail.

I found that the first essential in teaching adults is the creation of discussion. The next is thoro preparation. I would endeavor to have all problems come from the individual, then I would let them attempt their own solution. We could have experimental data or other information ready and then the final conclusion would be drawn. I made little use of lecturing, this being done only to explain such things as the fundamental principles of feeding, or diseases and parasites. I aimed to teach mainly by the problem method with the result that early in our series of lessons some of the men had two or more changes of practice ready for their project work.

(Continued on page 32)



Methods



Individual and Team Demonstration As a Method in Teaching

A. M. FIELD, University of Minnesota

TEACHERS of agriculture employ a variety of valuable methods and devices that are selected, planned, and executed to aid in the achievement of certain specific objectives designed to contribute to the knowledges, attitudes, and skills of the students. Of the many effective techniques employed, the individual or team demonstration has become a widely recognized method of considerable value in teaching and learning. Altho the demonstration has found its greatest development and use in agricultural extension activities, especially in connection with 4-H Club work, it can be used with equal effectiveness in many forms of community leadership work and in class teaching. Teachers of agriculture have come to regard the demonstration as an effective means of motivating learning activities. The following material is presented with the hope that it may be helpful in stimulating a greater interest in the use of the demonstration in the teaching and the learning processes:



A. M. Field

prepared demonstrations are ineffective because the demonstrators do not fit appropriately into the pattern of the activity.

Types of Demonstrations

In general, demonstrations may be classified as follows according to the purpose for which they are developed:

1. The purpose of the demonstration may be to teach something to the demonstrators.
2. The purpose of the demonstration may be simply to show improved practices.
3. The demonstration may be designed to present new practices and to teach others how to do the jobs involved in the new activities.
4. The demonstration may be used as a medium thru which individuals or group members can show the results of their work.
5. Demonstrations may serve two or more of these purposes.

If the results of the demonstration are to be in accord with the objectives, the leaders should make certain that the objectives are clearly understood by the demonstrators. The reason for this is that such understanding is essential as a basis for a whole-hearted, purposeful performance by the demonstrators. Many demonstrations lack life, drive, and personal appeal because the members of the team are expressing the purpose, the plan, and the story of someone else instead of their own. The demonstration story should not be written for the team but should grow out of the life experiences of the demonstrators. The story which is an expression of personal experiences is likely to incorporate a human appeal that will hold the attention of the audience.

Value of Demonstration

The demonstration is valuable as a teaching and learning device because it stimulates interest in doing things well. It permits of teaching thru concrete situations by properly balancing information and performance. The demonstration may be used as a competitive activity which in itself makes a strong appeal to persons of all ages. Another important feature of the demonstration is its value in developing leadership, teamwork, and a spirit of co-operation among the participants. The competitive feature makes the demonstration effective in stimulating interest in group activities by furnishing a motive and an outlet for friendly rivalry among individuals, classes, clubs, or other organized groups. It is also an effective method of teaching facts, principles, and practices because a well-presented dem-

onstration appeals to many avenues of learning. For example, the appeal may be thru the eyes, ears, emotions, and feelings. The demonstration should leave the observers with a definite and permanently improved point of view, or attitude and with a usable body of ideals, facts, principles, standards, and techniques so impressed that they will tend to find expression in the life of each individual who can well profit by the demonstration.

The psychology of persuasion, perhaps, plays an important part in making the demonstration effective. If the purpose of the demonstration is to persuade someone else to adopt the recommended practices, the demonstrators must proceed in an authoritative and convincing manner. An appeal must be made thru the emotions and feelings of the listeners rather than thru their power to reason or to evaluate the appropriateness of the practices presented. Before the listeners will adopt the practices, they must believe that it is the correct thing to do. People ordinarily believe what they choose to believe. Belief is a personal matter and is usually dependent upon personal desires. Therefore, the demonstrators must appeal to the emotions that arouse desires as the avenue thru which the ultimate response is to come in the form of actual practice.

Evaluation Guide for Judging Demonstrations

The accompanying evaluation guide for judging demonstrations is presented as an aid to those who have the responsibility for directing the preparation of a demonstration as well as for those who are called upon to judge demonstrations or to place a series of demonstrations in the order of merit. The items can be expanded or deleted according to the standards of the persons concerned. An objective basis for scoring demonstrations is undoubtedly more accurate than subjective judgment. This is especially true when there are several demonstrations to be judged and when the demonstrations are distributed over several days. There is no particular significance attached to the 200 points for the total score except that larger numbers make possible finer discrimination and fewer ties.

Features of a Demonstration

There are many principles or features of a demonstration which should be carefully observed in order to assure a high degree of effectiveness both to the demonstrators and to the observers. The following statements are suggestive

What Is a Demonstration?

A demonstration is an activity engaged in by one or more individuals designed to present in a rather concrete form the story of definite personal achievement, or to present certain desirable practices to be learned and performed by others who observe the demonstration. The point of view assumed in this article concerns itself particularly with activities of instruction in agriculture and rural leadership. However, the principles developed should be equally appropriate for other teaching.

The Objectives of Demonstration

It is important that individual or team demonstrations be based upon definite and well-defined, worthwhile objectives to be accomplished if the demonstrations are to achieve. The teachers—all leaders are teachers—and the demonstrators must have the objectives clearly in mind as a basis for developing the demonstration. A clear appreciation of the objectives must precede the planning of the demonstration because the purpose of the demonstration determines its set-up, its scope, and its technique as well as the qualities appropriate to the personnel selected to present the demonstration. Many well-selected, well-planned, and carefully

EVALUATION GUIDE FOR JUDGING DEMONSTRATION TEAMS
A. M. Field, University of Minnesota

Subject.....	Team.....		
Basis for Judging	Standard Score	Team Score	Remarks
I. Introduction (15)			
a. Statement of problem.....	6		
b. Purpose of demonstration.....	5		
c. Reason for choice.....	3		
d. Personnel of team.....	1		
II. Subject matter (40)			
a. Importance.....	10		
b. Completeness, simplicity.....	5		
c. Accuracy.....	8		
d. Organization, clearness.....	7		
e. Practicability.....	10		
III. Demonstrators (35)			
a. Appearance, attitude.....	10		
b. Ease of procedure, teamwork.....	8		
c. Voice, conduct, poise.....	5		
d. Action, drive, originality.....	8		
e. Reply to questions, knowledge of facts.....	4		
IV. Materials (40)			
a. Appropriateness.....	8		
b. Quality of materials and charts.....	7		
c. Effectiveness of display.....	5		
d. Skill in manipulation.....	8		
e. Co-ordination of story and materials.....	8		
f. Originality in choice and use.....	4		
V. Results (40)			
a. Appeal.....	10		
b. Holding attention and interest.....	10		
c. Effectiveness of lesson.....	10		
d. General reception by audience.....	10		
VI. Suitability of Demonstration (30)			
a. Individual experience or club practice.....	10		
b. Appropriate for home practice.....	8		
c. Appropriate for team.....	5		
d. Up to date (new, timely).....	5		
e. Length (15-40 min.).....	2		
TOTAL SCORE.....	200		
Judge.....	Final rank of team.....		
Team members.....			

of a few selected principles to consider but are not presented as a complete category of items to insure maximum returns from a demonstration. The suggestions are intended to supplement and explain the items incorporated in the evaluation guide for scoring or judging demonstrations. The demonstrators as well as the leaders should be thoroughly familiar with the standards presented in the evaluation guide. The following suggestions are derived from experiences in judging demonstrations and in training demonstration teams:

The problem for demonstration should be selected from actual experience.

The introduction should be designed to acquaint the audience with reference to the team, the problem, and the purpose of the demonstration.

A brief statement of the reason for selecting the demonstration serves to capture the interest of the audience.

Unity, simplicity, practicability, and completeness are important features.

The practices recommended must appear to be simple and easy to perform. A complex set-up discourages imitation.

Funny stories are not necessary.

Ordinarily the teaching demonstration should be designed to emphasize few, rather than many points.

The subject matter should be appropriate to the team and of significance to the audience.

The demonstration should furnish much opportunity for action, teamwork, and continuous co-ordinated activity of team members.

The demonstrators—appearance, per-

sonality, and attitude—should be a part of the demonstration.

The demonstrator must speak distinctly and loud enough to be heard by the entire group.

Long pauses or sudden breaks should be avoided.

The demonstrators should "play to the audience" rather than to the judges.

If the questions are asked by the audience, the answers should be brief, clear, and courteous.

The demonstration should furnish opportunity for manipulation and participation of team members.

The use of or display of materials must be co-ordinated with the explanation.

All equipment and materials should be displayed so as to be wholly visible to the audience.

Outlines, blueprints, products, or bulletins may be distributed after the demonstration if the materials add to the effectiveness of the demonstration.

Charts and other display material should be placed so as to be easily seen and should be a part of the demonstration pattern.

Charts should be attractive and arranged so as to make changes easily without detracting from the main story.

It is frequently effective to cast the demonstration in appropriate, natural settings.

Unique, clever, and original features can be made valuable if well done.

The demonstrators must talk to the audience and not to the charts and other materials.

Cheap humor, or vaudeville atmosphere are not desirable features of a demonstration.

(Continued on page 32)

Market Information Available to Teachers of Vocational Agriculture

E. M. LUTHER, Graduate Student in Agricultural Education,
Pennsylvania State College

MARKET information has been called the nervous system of the markets. No longer need the farmer market his products by a hit or miss method. Now he can use the "eyes provided for him by private and governmental agencies." Instead of sending his livestock and produce to market and then learning the market quotations, he now studies the market quotations in advance of shipment. The up-to-date farmer is looking ahead, studying what other markets are doing, finding where any shortages and surpluses exist or are likely to exist. He studies the market and crop conditions of the country, as well as general economic conditions.

Sources of market information. Two different kinds of agencies are concerned in supplying market information to farmers. They are:

I. Public agencies—

1. The federal agencies:

- a. The Bureau of Agricultural Economics of the United States Department of Agriculture.
- b. The Federal Farm Board.

2. The state agencies:

- a. The Bureau of Markets of the State Department of Agriculture.

II. Private agencies—

1. The grain brokers.
2. The newspapers.

3. The trade journals.

4. The farm dailies.

5. The farm weeklies and monthlies.

The following list contains the chief publications of the United States Government:

I. The U. S. D. A. Year Book—May be had free of cost by writing your congressman. It gives the general condition of agriculture for the country as well as for the world, whether agriculture is increasing or decreasing in acreage and in yield, records of shipments, storages, imports, exports, and a host of other information. The latter half of the book is replete with statistical information. A new Year Book should be added to the school library each year.

II. The Agricultural Situation—Issued monthly by the Bureau of Agricultural Economics of the U. S. D. A. It may be secured by sending 25 cents to the Superintendent of Documents, Government Printing Office, Washington, D. C., for a year's subscription. It shows the progress made in United States and world agriculture, gives the trend of crop production, the average prices received, the general trends of prices and wages, of price and purchasing power, of movements to markets, import and export market, the cold storage situation, condition and num-

(Continued on page 32)



Supervised Practice



A Gardening Project With Urban Families

G. P. DEYOE, Instructor in Agriculture, State Teachers College, Platteville, Wisconsin

DURING the year an urban gardening project has been initiated in Platteville, Wisconsin, from which some encouraging results are being shown. The primary purpose for this project has been to foster gardening as a means of self-help among those families which have been seriously affected by present economic conditions.



G. P. Deyoe

This gardening project is sponsored by a committee of which the writer is chairman. Other members of the committee are L. A. Bensend, instructor in vocational agriculture in the local high school, and three local business men. This committee which started to function during the past winter has been working in close co-operation with the Central Relief Association and the City Council of Platteville in matters of finances and other problems best solved thru the mutual assistance of these organizations. This co-ordination is facilitated by the fact that some members of the committee on gardening are also active members of the other two organizations.

Activities of Committee on Gardening

The program of activities of the committee on gardening includes the securing of land and other gardening materials for those families that could not otherwise finance them, the organizing of junior garden clubs, and the holding of evening school meetings.

As the work has progressed, it has been found possible to secure the help of local and state agencies in many ways. Land has been donated by many local people at a nominal cost. Sufficient seeds for 80 family-size gardens were secured without cost from the State Industrial Commission by whom seeds for such purposes had been secured with funds from a charity football game and from other funds at their disposal. Local women's clubs and other organizations have contributed voluntarily for cash prizes to be awarded to those families producing the best gardens. The Central Relief Association and the city council have given financial assistance for certain parts of the work.

Within the committee in charge of gardening work, the various activities have been distributed in such a way as to avoid an undue burden on the part of any one member. The three business men have made arrangements for land, directed the preparation of the land, distributed the seeds, and have handled

other details of similar nature. The high school instructor in vocational agriculture has charge of the junior garden club work. He has also assisted the writer with the evening school instruction and with the production problems of individual families.

Evening School a Distinctive Feature

A rather distinctive phase of the work has been the evening school in gardening. This feature was undertaken when it became apparent that instruction in gardening methods was needed by many of the people with whom the committee is working. It is believed by those in charge that these are the first meetings to be held in the state, and perhaps over a wider area, for the purpose of giving instruction in methods of gardening to urban people who are using this method of self-help in the present period of economic distress.

By group discussions in these meetings the problems and experiences of the people were determined and utilized in the evening school program. Four meetings were held in which problems on soil fertility, planting methods, pruning small and tree fruits, cultivation, insect and disease control, and storage methods were given primary emphasis. These meetings were held during the spring and as nearly as possible were planned to slightly precede the periods in which the activities would be performed in the gardens.

At one of these meetings instruction was given to the women in methods of canning vegetables. It is planned to hold more canning demonstrations in the late summer and fall. These meetings with the women are under the leadership of a local woman who has had considerable experience along these lines.

The evening school meetings were held in the city hall. The average attendance was slightly over fifty people. Forty-eight families were represented at these meetings. Over half of those present at the first meeting attended all of the other meetings. The attendance at all meetings was quite uniform. The trend was toward a larger attendance as the meetings progressed. While most of the people attending the evening school were from the families in which assistance was being given by furnishing land and other materials, other people who were interested in gardening were invited to attend. Approximately one-fourth of the people in attendance belonged to the latter group.

Measured in terms of attendance, interest, and the adoption of approved practices, it is believed that these meetings have been very successful.

Publicity Methods

To inform the public of the garden-

ing work as it progressed, a publicity program was started. Approximately twelve different articles and notices appeared in local papers. Some of these articles were for the purpose of arousing interest in gardening, others described the activities and plans of the committee on gardening, and the remainder were in the form of announcements of evening school meetings. For the families in which specific assistance by way of furnishing land or other materials was being given, circular letters were mailed prior to each meeting. This list of families had originally been obtained in part from unemployment and relief data which had been accumulated by the city council and other agencies. Other families were added as the work progressed.

In the entire gardening program the committee is working with 76 families in which there are more than three hundred people. The average size of these gardens for this year is approximately one-half acre, which is considerably larger than for previous years. In fact, many of these families had little or no garden in 1931. All of these families have been supplied with seeds for a family-size garden, and many of them have been furnished tomato plants and potatoes for planting. Plowing and other preparation of the soil for planting have been performed in many cases. Fertilizer was also furnished for some of the gardens. These materials and services represent a considerable sum of money, but it is believed that the expenditures are justifiable under the circumstances and that the psychological and practical effects of making it possible for these families to produce a large part of their food supply will more than repay the costs of the program attempted.

Some Related Problems

Some vital questions can well be raised as the result of the experiences discussed. For example, under the present economic conditions at least, is it not justifiable for an agriculture teacher to extend his program so as to more definitely include urban people and their agricultural problems, as well as rural people and the major farm problems? Would not such a broadened program serve to establish agriculture more securely as a legitimate and necessary part of our public school instruction? Is it not true that such an extension of program would meet with practically no opposition since the field of adult education in agriculture with urban people is practically untouched by other agencies? Does not such a program have as great if not greater possibilities for the teacher in general agriculture as in vocational agriculture?

A Summary of Inaccuracies and Suggestions in Keeping Hog Project Records

H. H. GIBSON,
Teacher Trainer in Agriculture,
Oregon State Agricultural College

DURING the past two years I have spent much time and gathered much material relating to various problems in project record keeping and accounting. I have analyzed hundreds of project books with reference to mistakes and inaccuracies. I am here listing some of the outstanding inaccuracies I have discovered in keeping records on projects. I believe a study of these inaccuracies should help teachers of vocational agriculture avoid many mistakes commonly made in project record keeping and project cost accounting.

1. Listing same items in both beginning inventory and expense record; hence counting expense item twice.
2. Information lacking that would give pounds feed per pound gain due often (1) to failure to record beginning weight of hogs, (2) final weight of hogs, (3) amount and kind of feed in terms of pounds, (4) failure to separate feed items for fattening hogs from other animals including brood sows.
3. Amount per hour allowed for self-labor sometimes varies from 10 to 25 or 30 cents among boys in same school and in one case 10, 15, and 25 cents per hour allowed by same boy in same project.
4. Kinds and weight of feed not given; only cost.
5. Items, such as hog pens and hogs, included in beginning inventory, and count in summary as an expense, but are not included in closing inventory also still on hand.
6. Including both rent and interest on the same items and investment, quite common.
7. Counting a net loss on project as a net profit when adding to self labor cost to get "labor income," a rather common mistake.
8. Cost of growing and fattening out litter of pigs not based on natural cycle of production. Cost of pig at market time should include (1) cost of keeping sow and pigs from weaning time to weaning time, plus (2) cost of growing out and fattening. Often the cost of keeping sow for most of two weaning pig periods is included in cost of growing and fattening; hence making pound cost of producing pork too high. This is due often to beginning and closing project on arbitrary dates rather than confining project dates and records to natural cycles of production; again cost may be too low because full cost of growing weaner pigs and fattening does not include full cycle of market hog production.
10. Failure to allow rent on some projects for hog lots, buildings, or pasture in some cases while doing so in other cases, even in same department.
11. Failure to charge interest on some project investment while doing so in others in the same school.
12. Including costs for hogs or other items purchased during project in the closing inventory while omitting them in the expense record.
13. Hogs that were sold and recorded in receipts also included in the closing inventory; hence counting as receipt twice.
14. Frequent cases where the number

of hogs in closing inventory plus number sold does not agree with the number in beginning inventory plus number bought or raised.

15. Allowing no expense items for weaner pigs either in the beginning inventory or expense record, resulting in an unusually large labor income.

16. Apparently too much variation in amount of self-labor for hog projects, in some cases labor costs very high and in other cases low—as for instance, 10 minutes a week for 26 weaner pigs until market time.

17. Failure to keep separate records for different project enterprises, making it impossible to determine separate costs, receipts, and income; for instance, in growing corn for hog project, the corn is fed the hogs but only the labor of growing the corn is charged against hogs as a feed cost for hogs. Again the amount of corn raised and fed not given. Failure to keep different project enterprises separate leads to many inaccuracies and at best makes it impossible to tell only whether boy has made or lost on project as a whole.

18. Failure to enter pasture as a feed cost very common even tho statements are made in diary, labor records, and elsewhere that hogs were grown largely on alfalfa or clover pasture along with skim milk during summer. Nor are rent items allowed to cover these pasture costs. Such omissions result in incorrect computations and conclusions for cost per pound.

19. Beginning and closing dates often difficult if not impossible to determine. The blank form for this item of information is not filled out and frequently when filled out, dates of project records seem to vary considerably from the beginning and closing date as given elsewhere in the project book.

20. Cost of breeding and boar service not included in expense record.

21. When computing cost per pound of pork production, the increase in weight of hogs on hand at close of project is not included. The total costs are divided by the weight of only hogs sold. The difference between beginning and closing inventory weights of hogs should be considered as well as weight of hogs sold, when figuring cost per pound of producing pork.

22. Questionable whether some projects can be considered the boys' projects due to small amount of self-labor. One project records boy with 40 hours labor; other help with 127 hours. In this instance boy has a labor income of \$153.52 for 40 hours labor or approximately \$4 per hour.

23. Where two project records are mixed together, analysis will show that boy has made on one project and lost on the other. Yet there is no indication from the project book records that the boy has made this discovery.

24. An analysis of pounds feed per pound gain would lead boy to a discovery of inaccurate records. In one project, a boy made 500 pounds of pork on 1,000 pounds of feed. This may have been a small project where waste was fed without cost. It would seem that records should be kept of all feeds fed even tho feed was secured free of charge.

25. Frequent failure to include skim milk in feed items, this item of feed being discovered in reading diary or project story.

Suggestions to Teachers of Agriculture for Improving the Weekly "Project Round-Up Period"

H. H. GIBSON,
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MANY teachers of agriculture now set aside one day a week exclusively for study of special project problems. This is in addition, of course, to the other occasions used for project study and planning and for relating class and project work wherever the opportunity arises. From my experience in the study of project books and from my observations regarding the use of this period, I believe that much could be done to make this weekly round-up period much more interesting and helpful to the pupils.

A too common practice is to request the pupils in a general and offhand way to bring their records up to date and to do whatever needs to be done in the way of project study and planning. Oftentimes this is a sort of blanket assignment which leaves many of the pupils with nothing specific to do. The more intelligent and interested boys may know in the main what to do and how to go about it, but others do not. Some pupils get "stalled" with the result that considerable time is wasted, and worse still, bad habits of study and idleness may be formed. Too often the teachers confine their time and effort entirely to working with the boys individually as their time may permit and as the emergency needs of the boys require. With this situation in mind the following suggestions are made with the view to improving the efficiency of this weekly round-up period:

1. In advance of the weekly round-up project study, instructor should go over each pupil's book in order that he may (a) make a list of needs and problems of each boy individually, and (b) that he may discover the project problems and difficulties common to the class as a whole.

2. The problems and difficulties discovered to be common to the class as a whole should be made a matter of class discussion preliminary to the individual project work that follows. For instance, a number of boys may not be putting in their records the different kinds and weights of feeds used in their projects. Experience shows that for every project enterprise there is a pretty well defined set of difficulties and mistakes that are common to the group. Much time can be saved by making these problems, when they arise, a matter of class discussion so that each boy will be on the lookout for them in his particular project.

3. Make a list of items involving the more common problems, mistakes, and difficulties which the boys encounter in their project record keeping. This list can be used as a permanent reference by the boys against which they can check their own project records to determine whether they are up to date, correct, and complete. This serves as a sort of permanent assignment for the pupils' record keeping work, and, in addition to the individual list of needs or problems which the teacher makes out for each boy from time to time, will serve to

(Continued on page 32)



Farm Mechanics



Methods Used in Trying to Do a Good Job in Teaching Shop

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Instructor in Vocational Agriculture,
Marceline, Missouri

TEACHING a course in farm shop in connection with and as part of the regular two-unit production courses and making something worthwhile of it has been a difficult task for me. As a result I have been constantly changing my methods in trying to arrive at a basis of greatest efficiency from the standpoint of time consumed and results accomplished. How well I may have succeeded is yet to be determined.

The methods I am using this year are essentially the same as those of last year with some improvement. I have been able to get more constructive work done, with less time wasted by each student, with these methods than with any methods I have used. In explaining the methods used I will attempt to describe forms and how they are applied.

I offer some practice in 15 job groups, dividing them into two divisions, A and B. Under division A are those job groups which are more or less related to woodwork, and include, besides woodwork: drawing, tool care, painting, glazing, concrete work, and masonry. While under division B are those job groups more related to iron work and include, besides iron work: sheet metal work, pipe fitting, belt work, harness repair, rope work, gas engines, and electricity. (Farm machinery is retained as part of an advanced course in agricultural engineering.)

At the beginning of the year, a list of the job groups and their respective job operations is made. Each division is arranged on a separate long sheet of paper, down the left-hand side of the sheet. Across the top are placed, in narrow, vertical, blank columns, the names of the students who are assigned to that division. Those entering the class each year are placed in one division. The size of the division varies somewhat, due to the changing numbers of new students.

This list is posted on the shop bulletin board, and the attention of the students is called to the shop work they will be required to do during the year. Each student is expected to become fairly proficient in each of the job operations in the several job groups in his division. Each student is required to complete some major shop project which will involve the greatest possible number of job operations. Such projects must be approved before the work is begun.

Making the divisions as described makes possible the full utilization of shop equipment where the supply is limited, as is the case in many schools. This leads to maximum efficiency in its use.

A list of job sheets from which the student may select jobs is posted on the bulletin board. For the most part, selection is not allowed until some proficiency has been attained in the more basic

job operations, gained by performing certain exercises of the job group.

At the close of each shop period each student fills out a report blank giving such items as the job, group, whether required or optional, time spent, date, difficulties encountered. These are filed in a single pigeon hole in a cabinet in which each student has individual space. After the shop period each report is credited to the student on a form prepared to show the student's name, job group, and the number of shop periods spent on that job group. This is valued in noting the advance the student is making. After checking off the report, the sheet is placed into each student's pigeonhole from which he secures it to report his next period's work. When the student has completed a job, he files his report in a pigeonhole marked "Complete," from which it is removed to use in giving a grade on the completed job. A grade is placed on the completed report form and placed in the student's file.

During the shop period the manner of each student's work is noted and this, along with his completed job, is used to credit him with proficiency in the job operations performed. When the student has developed a reasonable degree of proficiency in the job operations involved, he is given credit for passing work on the list of job operations in the space under his name opposite those job operations.

At the close of the year each student is required to take uniform objective tests over the job groups assigned to him at the beginning of the year.

In my experience of using this method I have found that a great deal of the drudgery of trying to keep students busy has been eliminated. If there are no other merits to these methods, I feel I will be justified in continuing to use them.

Cost Accounting in the Shop

R. W. HILL,
Instructor in Vocational Agriculture,
Lynch, Nebraska

ASYSTEM for keeping account of hardware and other supplies for shop work has been used successfully at Lynch during the past school year. A year's supply of the common sizes of screws, nails, bolts, bar iron, and other hardware was purchased by the school board at the beginning of the year. Small supplies of each size are put out in labeled compartments in a cabinet to which only the tool checker has access. The main supplies are kept in a locked chest in the back of the shop. This chest also serves as storage space for such articles as extra saw handles, hammer handles, files, drills, paint brushes, sandpaper, and so forth.

Each day the tool checker takes a sheet of paper on which he keeps account of tools checked. He makes a record of supplies used by each student. At the end of the period this sheet is handed to the instructor who enters the

(Continued on page 29)

Shop Skills Taught From Actual Farm Jobs

HAROLD E. VANCE,
Instructor in Vocational Agriculture,
Ponca, Nebraska

PERHAPS the first question arising in our minds when we think of teaching shop skills is "What jobs or exercises can we plan thru which to teach these skills? Let us ask ourselves "Why teach mechanics in the agriculture department?" It is to fit the boy for more efficiency on the farm. This being the purpose in our shop program, why not use actual farm jobs to teach the desired skills?

The first and most logical place to obtain these farm jobs is from the boy's home farm. There are many advantages in using jobs the boy might bring from home. First, it will increase the interest of the boys in the shop program. I find that the boys take a great interest in planning their shop program at home with their fathers. The boys would much rather work for themselves than on jobs that are not actual jobs. Second, such a shop program increases the interest of the parents and neighbors. When the boy does a good repair job in the shop, the parents are proud of the job and will show it to their neighbors. This should be the best kind of advertising for the department. It should increase the interest in the shop program. It may also improve the quality of work turned out of the farm shop. It is the quality of shop work which people notice rather than the quantity.

Some of the farm shop jobs we have completed in the shop which have made possible the teaching of very important skills are sharpening the teeth of a drag, re-wooding grain elevator, re-wooding a manure spreader, re-building a hay sweep using the irons from the old sweep, re-building a wagon box using old irons, or installing a new floor in the box, building movable hog houses, brooder houses, laying houses, hay racks, hog feeders, cattle feeders, poultry feeders, soldering oil cans, milk pails, strainers, poultry waterers, boilers, and so forth. A large number of boys bring in the tools from their home shop and polish, sharpen, repair, adjust, and put them into working condition. Many boys build tool boxes or tool chests for the tools they have repaired in the shop.

I find that a large part of the jobs on the farm are repair jobs, thus the shop program should include a large amount of repair work. The repairing of machinery will acquaint the boys with the working of different machines, thus we are teaching farm machinery at the same time the boys are acquiring the skills. The machinery repair will also impress on the boys the importance of proper care, operation, and repair of machinery.

If we are teaching farm shop, let us actually use the farm jobs available on the boy's home farm or on the farms of the community.

Salvaging Material for Use in Farm Mechanics

E. D. FAHRNEY,
Instructor in Vocational Agriculture,
Stapleton, Nebraska

NOTING an article some time ago about an instructor who retrieved a number of cream cans from the junk heap, repaired them, and made them serviceable again suggests that I tell of our experiences in financing work in farm mechanics at Stapleton, Nebraska.

Due to a bank failure funds were limited. We practiced every economy possible. One of the first steps was to take a trailer out of the junk pile and salvage everything that looked as if it could be used.

Most of the tin and sheet iron that we used came from old windmill fans and tails, or from metal signs.

Old tractor wheel spokes furnished us material for a number of good clevises.

Some old telephone magnetoes and a Ford magneto have furnished material for chisels.

Old rake teeth have furnished us material for screwdrivers, punches, and light chisels.

Rods, straps, and other pieces of iron picked up have been used to iron a feed bunk, make bolts, gate hooks, neekyoke rings, and dozens of other things.

We used the spokes from a broken Ford wheel to make staples for our gate hooks.

One boy even straightened out part of a heavy coil spring to make some heavy cold chisels. They seem to be good ones.

Another boy made a pinch bar from a long axle.

A Portable Feed Grinder

E. D. FAHRNEY,
Instructor in Vocational Agriculture,
Stapleton, Nebraska

LAST fall one of the boys asked about the possibility of mounting a feed grinder on an old car frame, using the motor for power. We decided it could be done.

When the car was driven in, I began to have doubts for it was a 1919 Dodge touring that had been used as a truck and, all told, had been driven over 100,000 miles. However, the engine seemed to have plenty of power.

We first thought of installing a pulley on the drive shaft. This would permit driving the car under its own power, but the owner preferred that we connect the grinder direct. The outfit probably would not be moved often or very far and so could be towed about.

The grinder furnished was an 8-inch burr grinder operated with a belt. Our first step was to disconnect the differential and cut off the drive shaft. We then took four heavy, auto spring leaves from the junk pile and, with the forge, made them into hangers to hold the grinder to the auto frame and in line with the transmission.

Our next problem was that of joining the grinder shaft to the stub of the drive shaft. Due to the short length of the grinder shaft and the position of the two bearings, it was necessary that the two be butt-welded without increasing the size of the shaft. This stumped us as we could not use a sleeve, and doubted

our ability to weld them in our forge. We decided that the best thing to do was to have our local blacksmith use his oxygen-acetylene torch, and the result was a perfectly true shaft that lined up exactly with the two grinder bearings and the universal joint at the end of the transmission.

In order to give the whole outfit more height to facilitate scooping, we made new spring shackles to fit over 4-inch blocks inserted between the springs and axle. A larger feed hopper was built, and with a few other minor changes, the outfit was ready to use. It has given satisfaction and has every indication that it will continue to do so. The old engine pulls the grinder in fine shape in high gear. The speedometer, connected to the transmission, furnishes a good speed indicator.

I consider this project valuable because of the number of new jobs and problems that it brought before the boys. We took time to study and understand the workings of a car differential. There was forge practice, an example of acetylene welding, and so forth.

If we were to do the job over or get another similar one to do, I believe that I would move the rear wheels ahead the length of the springs and mount the grinder on the rear of the frame, back of the wheels. The grinder would then be more accessible and also easier to get nearer to the bins.

Cost Accounting in the Shop

(Continued from page 23)

accounts in a small ledger kept for that purpose.

Two weeks before the end of the semester each student is handed an itemized statement of supplies which have been charged to him. If accounts are not paid by the end of the semester, no grades are recorded until the bill is paid. The system is explained to the boys before they use any supplies, and the prices charged are posted in order that boys can figure costs before checking out supplies. To date less than a dollar has been lost thru unpaid accounts.

This system is economical and accurate; it places most of the responsibility on the boys, requires very little of the teacher's time, gives no chance for "mooching" supplies, and eliminates going down town for supplies in school time. It also gives the boys practice in recognizing hardware by description. When boys procure screws, nails, or other supplies from the tool checker, they must be able to call for them by name, size, and description instead of just looking thru the cabinet until they find what appears to be the right size, paying no attention to the labels, as is usually done when they have access to supplies.

Each student checks tools and supplies in turn, one week at a time.

Supplies are priced in convenient terms for small amounts. Screws and stove bolts are listed as the number for one cent. Bar iron is listed at the price per foot for each size.

In many types of farming, success is determined in no small degree by the skill of the farmer in adjusting, operating and repairing machinery and equipment. This is becoming increasingly true.—L. B. P.

How to Stop Loafing in the Shop

J. A. KOVANDA,
Instructor in Vocational Agriculture,
Ord, Nebraska

TOO many articles are written from the standpoint of the ideal student. He creates fewer problems and is more capable of adjusting himself to the school program. Too little is said of the mediocre shop student, the one who cannot or does not plan work for himself and usually succeeds in spoiling that which is provided for him. Often he is a loafer.

Loafing in the shop is an old problem that is never permanently solved. It is especially a problem of the beginning teacher who is sometimes over-anxious to gain the friendship of the pupils. Loafing may also occur in the program of experienced instructors when unforeseen circumstances arise.

No claim is made to a never-failing solution for this vice. The method used may be somewhat unethical, but it stops loafing and it is so simple that it may be worth passing on.

To meet regulations shop students are required to put in four hours of work each week. When a boy works 3½ hours and loafs the remaining 30 minutes, he receives an "incomplete." He must then engage in 30 minutes of extra work to remove it. Such work can be done at any time after 4 o'clock.

The boy may contend that he has nothing to do. That should be largely his own responsibility. It should be explained to him that if he cannot provide himself with anything worthwhile and practical to do in the shop, then he should change his enrollment to some other course. Fifty shop boys should not be allowed to depend upon their instructor to find work for them. Nor should they be required to putter away at meaningless exercises when practically every farmstead has countless numbers of worthwhile mechanic jobs and problems.

An experience with a pupil might be cited. This pupil followed out the common procedure of selecting a hog project and building a house, self-feeder, and other equipment needed. All went well until one day the equipment was completed 20 minutes before dismissal time. The boy got the idea that he was entitled to spend the remainder of the hour looking thru the window at a girls' gym class. The four-hour work ruling would have taken care of his case.

In cases such as the foregoing, it might seem unreasonable to expect the boy to start on another job for so short a time. It is not. It is surprising how ingenious boys are at occupying themselves when under this regulation. There is always plenty to do, if only to sharpen a blade, or extend help to another student.

It is not meant to leave the impression that four hours of work weekly is the only requirement needed. If this were the case, students who had lost interest in unfinished projects might make heartless pretenses at working, and accomplish nothing.

The time requirement is used only as a supplement to the point system or other phases of the shop curriculum. It is needed only where undesirable individuals or groups are passed over onto the agricultural department.



Future Farmers of America



Future Farmers Arrange County Collective Exhibit

ALTON YOUNG, Vocational Agriculture Teacher,
Minden, Nebraska

THE Future Farmers of America chapter at Minden, Nebraska, has taken a unique place in showmanship at the Nebraska State Fair. For the past two years they have successfully gathered and shown the county collective exhibit in competition with the other counties of the state.

The project was taken over by the Future Farmer organization in 1930 when the former exhibitor declared his inability to serve longer. The boys under the direction of Alton Young, their adviser, volunteered to assume the responsibility of representing the county. Six boys were selected to do the work of gathering the hundreds of samples of grains, seeds, grasses, hays, and vegetables to fill the allotted space. The boys used a hive of live bees at work as a central theme for the exhibit, arranging the gathered materials to form a background. Seventeen Nebraska counties were represented the first year. The boys won eleventh place and \$240 in prizes.

In view of their past experience the same boys were selected to conduct the exhibit in the fall of 1931. A much larger exhibit was gathered to compete with the growing number of exhibitors.

The boys placed the county and the Future Farmer banners made of blue and gold felt as a centerpiece, using blue crepe paper to cover the background on either side. The foreground was covered with yellow crepe paper, making the

exhibit as a whole blend with and match the banners.

For a central idea the boys selected wheat feeding to hogs as a representative industry of the county. A miniature hog farm was erected in the center foreground with self-feeders, hoghouses, windmill, fences, and china pigs to make it appear more realistic. The hogs were shown on a green sawdust pasture eating from a self-feeder with a glass front which showed the mixture being fed. The feeds were ground wheat, tankage, and minerals in separate compartments. Signs were displayed showing the amount of wheat produced in the county and the value when sold on a 30-cent market. Other signs pointed out the value of the crop and the corresponding gain when fed and sold thru hogs. A toy electric train was used to furnish movement and to draw the attention of the crowd to the educational features of the exhibit. Several toy cars were loaded with wheat going to a 30-cent market and several more cars were loaded with hogs showing that shipping thru hogs brought returns of 70 cents per bushel.

This Future Farmer exhibit placed fourth in competition with the 26 counties entered. It was beaten by the three heaviest-populated counties. Kearney County in which Minden is located ranks fifty-second in population in Nebraska. Prizes amounting to several hundred dollars were awarded for this exhibit.

Achievements of the Provençal F. F. A. Chapter, Provençal, Louisiana

P. H. SINGLETARY,
Teacher of Agriculture

SOON after school opened last fall the agriculture boys organized a local chapter of Future Farmers of America and set up 25 objectives. A few of the outstanding objectives from which we received money and publicity were as follows:

- (1) Popularity contest.
- (2) An F. F. A. entertainment.
- (3) Enter National Public Speaking Contest.
- (4) Father and Son Banquet.
- (5) Edit news letter.
- (6) Enter local newspaper contest.

Popularity Contest

The F. F. A. boys appointed a committee of five to select and nominate students from the high school to run in this contest. There were 13 offices to be filled as follows: prettiest girl, ugliest boy, best athlete (girl), best athlete (boy), neatest girl, neatest boy, best disposition (girl), best disposition (boy), best all-around girl, best all-around boy, sissiest boy, wittiest boy, most handsome boy.

Each member of the committee made out a list of two nominees for each office. The committee then got together and selected 27 students to run for office. Candidates were notified that they were to run in friendly rivalry and to solicit votes on their merits and not on the demerits of their opponents. They all consented to do their best.

Political speeches were made by the campaigners in general assembly. Each candidate spoke in the interest of his own office. The assembly enjoyed the speeches, and they were educational to the candidates.

Now came the balloting, and it cost 1 cent per vote. The polls remained open for two weeks during which time the school staged an entertainment, thereby giving the candidates an opportunity to solicit votes.

At the close of the polls the final count showed 3,438 votes cast. The money was used for the equipping of the F. F. A. room. The department is fully equipped.

"To succeed you must earnestly desire."

Public Speaking Contest

Provençal F. F. A. boys entered the National Public Speaking Contest and won second place in the First District of the state.

Five subjects were selected, and available material was arranged. The boys were allowed to choose the subject they desired. The paper judged to be the best



was on the Future Farmers of America and was entered in competition with others of the First District which is composed of 13 agriculture schools.

"The future welfare of humanity depends upon the training of the present."

Father and Son Banquet

The Father and Son Banquet was staged April 22. Twenty-five boys took part and brought 50 cents, or its equivalent in products, for the banquet. The menu was planned and served by the home economics girls. The banquet was presided over by the president and was opened with an invocation by a local father, followed by the opening ceremony of the F. F. A. Then came the welcome address by the principal. During the banquet the guests were called on to make short talks.

"Those who eat the most are not always the fattest."

The News Letter

The F. F. A. department mailed 140 copies of their first news letter, one to each of the agriculture departments in the state and one to other persons interested in this work. The total cost of the letters was \$7, derived from the F. F. A. entertainment.

"No termination without determination."

Publicity Contest

At the beginning of school the local parish paper, Natchitoches Times, announced a contest in publicity work, offering a registered Jersey bull calf to the school sending in the most worthwhile news for the nine months. There were 13 high schools in the parish, and all took part. The F. F. A. department immediately set to work to win the calf. Each week the reporter solicited news from various departments of the school to be published in the paper. As a result of untiring effort 360 inches of column space was published. The calf was won by the Provençal F. F. A. chapter, and the reward is worthy of the effort.

"No prize without a struggle."

George Washington Playlet

THE editor has received and read the playlet entitled George Washington, the Farmer, prepared by H. H. Anderson, teacher of vocational agriculture, Princess Anne, Maryland, and presented by the local chapter of F. F. A. "The material used in the skit is as nearly as possible authentic. The incidents portrayed are, however, entirely imaginary." Mimeographed copies may be obtained thru Mr. Anderson at 25 cents per copy.

Wyoming Organizes College Chapter of F. F. A.

THE Wyoming Collegiate Chapter of Future Farmers of America was recently organized at the University of Wyoming. Its purpose is to promote a better understanding of the F. F. A. and the duties of the local adviser. The membership consists of teacher-training students, with former F. F. A.s now enrolled in college as associate members.

At the organization meeting Carl G. Howard, state supervisor of agriculture, gave a talk on the national organization and the state associations. A constitution was formulated and officers elected.

Training Advisers for Future Farmer Chapters

ROY L. Davenport, Department of Agricultural Education, Louisiana State University

THE national organization of Future Farmers of America in session at Kansas City on November 17, 1930, granted permission to teacher-training departments to establish associate or training chapters of Future Farmers.

This action of the national organization was significant in the development of the Future Farmers of America. The Future Farmer movement as an integral part of the program of vocational education in agriculture is an important one. The success of the organization will depend upon the interest of each member and the functioning of each local chapter. The interest of each member and the functioning of each chapter will in large measure be dependent upon the intelligent leadership and wise supervision by the local adviser. The delegates at the national convention realized that the success of the organization largely depends upon the training, vision, and wisdom of the local advisers.

New teachers of agriculture must be well trained to take up the direction of chapter activities, so there will be no lost motion when they replace other instructors. As the workers in vocational education have agreed upon the principle of participation in pre-employment training, why not apply it to training for work with Future Farmers of America?

With the ideal of stimulating, encouraging, and directing students to carry out the responsibilities of local advisers, the Louisiana State University Associate Chapter was organized in December, 1930.

The following resumé of accomplishments is a partial index to the enormous potentialities of this work:

1. Met regularly twice a month.
2. Issued a monthly news letter to chapters—"The Pelican News."
3. Secured complete F. F. A. equipment.
4. Organized two degree-teams.
5. Held demonstration of opening

and closing ceremony in nearby schools.

6. Held Greenhand and Future Farmer initiation.

7. Sponsored Best Chapter and Best Student contests.

8. Won first prize exhibit at Students' Agricultural Fair, Louisiana State University.

9. Won second prize float in agricultural fair parade.

10. Represented at numerous father and son banquets.

11. Held banquet.

12. Systematic presentation, analysis, and discussion of responsibilities of local advisers at meetings.

13. Represented at state camp to assist in Future Farmer instruction.

14. Plans completed for cabin on Louisiana Future Farmer camp site.

Active membership is limited to juniors and seniors in the college of agriculture who are majoring in agricultural education. Any former Future Farmer members registered in the university are included as associate members. Two grades of membership are included: Greenhand and Future Farmer. The present active membership numbers 47.

We learn to do by doing. No amount of theoretical or paper organization can possibly take the place of realistic participation when such vital issues are at stake.

The experiences of the Louisiana State University associate chapter are of paramount interest because their conclusions affirm the importance of having a collegiate organization for training purposes. The department of agricultural education of the Louisiana State University and A. and M. College has accepted the responsibility of training local advisers for Future Farmer chapters. Our findings with the associate chapter have been most gratifying, and we heartily recommend their conclusions to your attention.



Market Information Available to Teachers of Vocational Agriculture

(Continued from page 25)

bers of livestock and poultry, and so forth. Since it is so full of useful marketing information, it should be in all schools.

III. *The Agricultural Outlook* — Issued each March by the Bureau of Agricultural Economics. Gives the outlook of all phases of agriculture, and estimates the probable acreage for the coming season. While not strictly marketing information, it should be in the schools.

IV. *Crops and Markets* — Issued monthly by the United States Department of Agriculture. The price is 60 cents for one year. Secured by writing the Superintendent of Documents, Government Printing Office, Washington, D. C. Its informational matter is grouped as follows:

1. Cold storage holdings.
2. Cotton.
3. Crop and livestock reports.
4. Dairy and poultry products.
5. Feedstuffs.
6. Fruits and vegetables.
7. Grain and hay.
8. Livestock and livestock products.
9. Prices.
10. Recent agricultural publications.
11. Seeds.
12. Acreages and farm values.
13. A general outlook of agriculture.
14. Many other informational articles.

This publication should be in the schools.

V. *Monthly Crop Reports for the United States*—These reports begin with January, are issued by the Bureau of Markets of the U. S. D. A., and are free. A mimeographed report of about sixteen pages, and contains a wealth of material of value to the vocational teacher.

VI. *Weekly Market Review of Fruits and Vegetables*—This mimeographed page is issued by the Bureau of Agricultural Economics and can be had free by writing the Office of Publications, United States Department of Agriculture, Washington, D. C. Gives brief reports of crop conditions and prevailing prices, movements of fruit and vegetables, and holdings in storage. Of value to school located in the major fruit and vegetable growing sections.

VII. *The Daily Market Report of Butter, Cheese, Eggs, and Dressed Poultry*—This mimeographed report is issued daily by the Market News Service of the Bureau of Agricultural Economics at 615 Mariners and Merchants Building, Third and Chestnut Streets, Philadelphia, Pennsylvania, and can be had free upon request. It gives daily reports of market conditions for butter, cheese, eggs, and dressed poultry, with statistical reports for Philadelphia, New York, Boston, and Chicago, giving the receipts, cold storage movements, and the holdings at these points. This report is of value to vocational departments.

VIII. *The Daily Market Report of Livestock*—This mimeographed report is free and is issued by the Bureau of Agricultural Economics of the United States Department of Agriculture at Philadelphia and Pittsburgh. It can be

secured by writing the Pennsylvania and United States Department of Agriculture Livestock Market News Service, 306 Livestock Exchange Building, Pittsburgh, Pennsylvania, for the Pittsburgh report. It is not of much value except to those schools located in strong livestock regions or in regions where many steers and lambs are fed.

IX. *The Weekly Milk and Cream Report*—This mimeographed sheet is issued by the Bureau of Agricultural Economics and is secured free by writing the Market News Service, 615 Mariners and Merchants Building, Philadelphia, Pennsylvania. It gives the reports of the receipts of milk and cream in the Boston, New York, and Philadelphia market and the prices paid. It will be of value in schools in market milk areas.

X. *The Weekly Review of Wool Statistics*—Issued by the Bureau of Agricultural Economics, it can be secured free by writing Market News Service, 723 Appraisers Stores, Boston, Massachusetts. It gives the reports of market conditions of the Boston, Philadelphia, and New York markets, as well as the foreign wool market conditions. Of use only in wool-growing sections.

XI. *The Monthly Review of the Wool Market*—This publication is similar to the preceding one in all but the time of issue, this one being monthly.—Pennsylvania Rural Life Letter.

Individual and Team Demonstration As a Method in Teaching

(Continued from page 25)

Enthusiasm and intensity of purpose serve to hold the interest of the audience.

The demonstration should be designed to meet the needs of the group served.

The demonstration should set a strong pattern for practice.

A demonstration is not a lecture on a problem or practice.

Long, involved, and highly technical demonstrations are not effective.

Avoid long and uninteresting descriptions or stories.

Demonstrations designed primarily to win are not effective. It is better to select a unit of some practical project carried out by the members and then develop a winning demonstration from actual practice.

Suggestions for Improving the Weekly "Project Round-up Period"

(Continued from page 27)

guide him in keeping and bringing his project records up to date.

4. More class time should be taken in the discussion and comparison of the project results and practices. When this is done the boys begin to see more use in keeping records. Too much insistence and practice in merely keeping records without making use of them in a class discussion and otherwise, soon makes the whole business dull and uninteresting.

[In other columns of the magazine, is an article by Professor Gibson on "A Summary of Inaccuracies and Suggestions in Keeping Hog Project Records," which should prove very suggestive to the teacher in locating difficulties and errors.]

New Jersey Public Speaking Contestant Talks to 2,500 Farmers

THE big annual get-together of New Jersey farmers is Field Day at the College of Agriculture. June 15, some 2,500 farmers and their families gathered at the college to learn what the college and experiment station are doing for the agriculture of the state. On the speaking program were the president of Rutgers University and the dean of the College of Agriculture, and also, to the credit of vocational agriculture, the state winner in the F. F. A. Public Speaking Contest. This young man talked of co-operative marketing for farmers, and many favorable comments of his talk were heard after the meeting.

Prizes for the first, second, and third places in the state contest were awarded by the university at this meeting.

The advantages of having an F. F. A. boy appear before such a state meeting of farmers are obvious. The farmers learn that vocational agriculture and the F. F. A. are training the boys for leadership, and incidentally, the winning speaker has additional practice and gains increased confidence in his ability to appear before an audience.

Neighbors Gather for Double Evening School

(Continued from page 28)

I did not use an outside teacher until the closing evening. I believe it is a mistake to give the men the idea that they are to be entertained and that they have no work to do. I believe in having each man work out his problems in black and white. This gives him more of a feeling of accomplishment than any other one single thing.

The graduation exercises were one of the high spots in the school. Each member that had attended at least two-thirds of the meetings received a diploma. We had an outside speaker and a program was given by the F. F. A. chapter. Twenty-six of the 36 members received diplomas.

Success of any evening school can be determined by the improved practices resulting from the instruction. As a result of the unit in swine production, the men chose to do the following in the way of project work:

Eleven were to seed alfalfa for hog pasture.

Twelve to seed field for hogging down.

Fourteen to use sanitary measures in hog production.

Six to give brood sows more exercise.

Twenty-two to feed a better ration including bonemeal, alfalfa, protein supplement.

Five to improve breeding of stock.

Two to grow rape for pasture.

One sweet clover pasture.

I have visited each member of the school this summer, and I find that they not only are doing their project work but in many cases several additional improved practices suggested at meetings. I also find that men on the extreme edges of the community are copying the methods used by their neighbors who attended evening school; and the results of the school have extended far beyond the school walls.

